

## APPENDIX A – MASTER ASSESSMENT LIST

This appendix lists the questions to be used in assessing the RAVUE extrication devices applying the criteria established by the responder Focus Group on April 7, 2004. The SAVER Categories listed in parenthesis with each question are the five evaluation criteria categories that have been established by the Office for Domestic Preparedness – Systems Support Division for internet presentation. Thus, when this report is put in SAVER format, the Evaluator scores will be recomputed to correspond to the SAVER evaluation categories mapped for each question.

Questions 1.1; 9.1; 9.2; 9.3; 11.2; and 16.1 were not used in computing the numerical assessment scores in the Analysis Report and reported in Appendix C.

### RAVUE Extrication Devices - Master Assessment List

1. Ease of Use				
1.1	How many responders are required to extract a single 200 lbs. mannequin using this device? (SAVER Category - Capability)	1	2	3 4
1.2	Does the team appear to be adequately trained on the device? (SAVER Category - Capability)	1 Fully	2 Partially	3 Adequately 4 Somewhat 5 No
1.3	Does the device appear to be large enough to support the victim? (SAVER Category - Capability)	1 Fully	2 Partially	3 Adequately 4 Somewhat 5 No
1.4	Can the team easily fasten the device straps when the mannequin is loaded? (SAVER Category - Usability)	1 Fully	2 Partially	3 Adequately 4 Somewhat 5 No
1.5	Are the handles on the device large enough for the team to easily grasp them while wearing PPE gloves? (SAVER Category - Usability)	1 Fully	2 Partially	3 Adequately 4 Somewhat 5 No
1.6	Does each responder appear to have enough room to move about while all are using the device? (SAVER Category - Usability)	1 Fully	2 Partially	3 Adequately 4 Somewhat 5 No
1.7	Can the victim be easily removed from the extrication device by personnel wearing PPE? (SAVER Category - Usability)	1 Fully	2 Partially	3 Adequately 4 Somewhat 5 No

2. Lightweight				
2.1	Can a single responder in Level A PPE easily carry the device? (SAVER Category - Capability)	1 Fully	2 Partially	3 Adequately 4 Somewhat 5 No
2.2	Can the number of responders recommended by the manufacturer, carry, drag, or roll the device without difficulty while in Level A PPE? (SAVER Category - Usability)	1 Fully	2 Partially	3 Adequately 4 Somewhat 5 No
2.3	Can a single responder take multiple devices into the hot zone on a single trip? (SAVER Category - Usability)	1 Yes	2 No	
2.4	Does the device flex excessively when supporting a 200-pound mannequin? (SAVER Category - Capability)	1 No	2 Somewhat 3 Moderately	4 Significantly 5 Yes

3. Portability						
3.1	Can the team fold the device into a smaller size for transport? (SAVER Category - Deployability)	1 Fully	2 Partially	3 Adequately	4 Somewhat	5 No
3.2	Can one team member load/unload the device from a vehicle by himself/herself? (SAVER Category - Deployability)	1 Fully	2 Partially	3 Adequately	4 Somewhat	5 No

4. Durability						
4.1	Does the device show resistance to significant scarring, scuffing, or weakening? (SAVER Category - Maintainability)	1 Fully	2 Partially	3 Adequately	4 Somewhat	5 No
4.2	Did any part(s) of the device fail to function during the assessment? (SAVER Category – Maintainability)	1 No	2 Some	3 Several	4 Many	5 Total
4.3	Did the device failure cause the extrication to be delayed or restarted? (SAVER Category – Maintainability)	0 NA	1 No	2 Moderately	3 Significantly	4 Yes
4.4	Did the device failure result in injury to the Responder, damage to his PPE, or potential injury to the victim? (SAVER Category – Maintainability)	0 NA	1 No	2 Might	3 Would	4 Yes

5. Non-reactive/Reusable/Multiple Extractions						
5.1	Is the device reusable after each extrication? (SAVER Category – Maintainability)	1 Fully	2 Partially	3 Adequately	4 Somewhat	5 No
5.2	Does the device require adjustments and/or replacement of part(s) between uses? (SAVER Category – Maintainability)	1 No	2 Some	3 Several	4 Many	5 Yes

6. Use in Multiple Environments (Vertical/Horizontal)						
6.1	Can the device be used to vertically <i>and</i> horizontally extricate the victim without him/her falling out or injuring team members? (SAVER Category – Capability)	1 Yes	2 Most Times	3 Some Cases	4 Occasionally	5 No
6.2	Does the device hold the mannequin in place in such a way that would not injure a patient and/or restrict the airway or circulation? (SAVER Category – Capability)	1 Fully	2 Partially	3 Adequately	4 Somewhat	5 No
6.3	Does the team appear to be able to maneuver the device through tight spaces (i.e., doorway) without difficulty? (SAVER Category – Capability)	1 Fully	2 Partially	3 Adequately	4 Somewhat	5 No

7. Ease of Decontamination						
7.1	Does the team appear to be able to fully manipulate the device while undergoing decontamination? (SAVER Category – Maintainability)	1 Fully	2 Partially	3 Adequately	4 Somewhat	5 No
7.2	Can the device be easily rinsed so as to reduce potential cross-contamination of victims? (SAVER Category – Maintainability)	1 Fully	2 Partially	3 Adequately	4 Somewhat	5 No

8. Equipment Compatibility					
8.1	Is the device compatible with medical equipment that may be used during an extrication? (SAVER Category - Capability)	Not Observable. Comments collected during debrief.			
8.2	Does the device <i>require</i> other pieces of equipment to maximize its efficiency? (SAVER Category - Capability)	1 No	2 Some Pieces	3 Several Pieces	

9. Cost (Not Observable – For Post Test Analysis Use)					
9.1	Is the cost consistent with other like devices? (SAVER Category – Affordability)	1 Lowest	2 Lower	3 Same	4 Higher
9.2	Are there replacement parts required to reuse the device? (SAVER Category – Affordability)	1 No	2 Yes		5 Highest
9.3	Is the device cost compatible with the device capabilities and usability? (SAVER Category – Affordability)	1 Fully	2 Generally	3 Adequately	4 Partially
					5 No

10. Ease of Assembly					
10.1	Does the device require assembly? (SAVER Category - Deployability)	1 No	2 Yes		
10.2	Did the device come with instructions? (SAVER Category – Deployability)	1 Yes	2 No		
10.3	Are assembly instructions affixed to the device? (SAVER Category – Deployability)	1 Yes	2 No		
10.4	Are tools required for assembly? (SAVER Category – Deployability)	1 No	2 Common Tools	3 Special Tools	
10.5	If assembly is required, is the device color coded to ease assembly? (SAVER Category – Deployability)	0 NA	1 Easy to Follow	2 Difficult to Follow	

11. Device Storage (Not Observable)				
11.1	Can the device be routinely stored on the transport vehicle? (SAVER Category – Deployability)	Comments to be collected during the debrief. 1 2 3 4 Yes Must Rearrange Some Difficulty No		
11.2	Does the device have to be stored in a specific environment which would limit storage options, i.e., temperature, humidity, sunlight? (SAVER Category – Deployability)	For Post Assessment Analysis Use.		
11.3	Does the device require a large amount of storage space? (SAVER Category – Deployability)	Comments to be collected during the debrief. 1 2 3 4 5 No Average Slightly More More Excessive		

12. Interagency Compatibility (Collected During the Debrief)						
12.1	Is interagency compatibility an issue with this extrication device? (SAVER Category – Capability)	1 No	2 Slight	3 Some	4 Significant	5 Yes
12.2	Is there any special training required that would prevent other agencies from being capable of using the device? (SAVER Category – Usability)	1 No	2 Some	3 Yes		
12.3	If training is required, could it be provided within 15 minutes at the incident site? (SAVER Category – Usability)	0 NA	1 Yes	2 No		

13. Sizability (Collected During the Debrief)						
13.1	Does the device permit adjustment for victims of different sizes? (SAVER Category – Capability)	1 Yes	2 Significant	3 Some	4 Slightly	5 No
13.2	Are adjustments hard or time consuming to make? (SAVER Category – Usability)	1 No	2 Some	3 Yes		

14. Simple Clear Instructions or Diagrams (Collected During the Debrief)						
14.1	Does the device require special instructions pertaining to assembly and/or use? (SAVER Category – Usability)	1 No	2 Slight	3 Some	4 Significant	5 Yes
14.2	Were the instructions thorough enough to illustrate the procedures for assembly and/or use? (SAVER Category – Usability)	0 NA	1 Yes	2 Generally	3 Inadequate	4 None
14.3	Are there hazard warnings in the instructions that are not labeled on the device? (SAVER Category – Usability)	0 NA	1 No	2 Yes		

15. Recoverability (Collected During the Debrief)						
15.1	Can the device be decontaminated for future use? (SAVER Category – Maintainability)	1 Yes	2 Easily	3 With Difficulty	4 No	
15.2	Would decontamination be difficult due to small/tight areas on the device? SAVER Category – Maintainability)	1 No Yes	2 Somewhat	3 Moderately	4 Significantly	5 Yes
15.3	Can the device be partially decontaminated and overpacked as contaminated waste? (SAVER Category – Maintainability)	1 Yes	2 Easily	3 With Difficulty	4 No	

16. Disposability (Not Observable – For Post Assessment Analysis Use)					
16.1	Does the device have special disposal requirements, e.g. environmental concerns, etc? (SAVER Category – Maintainability)	1 No	2 Some	3 Yes	

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## APPENDIX B – EVALUATOR DEBRIEFING WORKSHEETS

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This Appendix contains the Debriefing Worksheet filled out by each evaluator after each RAVUE assessment segment. Evaluators spent approximately twenty to twenty-five minutes forming their opinions and observations and then discussed their observation with the group for approximately another thirty minutes, filling out a group debriefing worksheet. Only the individual worksheets were used in computing the device scores as described in the body of the Analysis Report.

### RAVUE Extrication Devices - Evaluator Debriefing Worksheet

Date \_\_\_\_\_ Group # \_\_\_\_\_ Lane # \_\_\_\_\_

Segment 1 2 3 Device \_\_\_\_\_

#### 1. Ease of Use

1.2 Was the team adequately trained on the device?

1	2	3	4	5
Fully	Partially	Adequately	Somewhat	No

What would have made it better? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

1.3 Does the device appear to be large enough to support the victim?

1	2	3	4	5
Fully	Partially	Adequately	Somewhat	No

Would you change the size and/or strength of the device? If so, how? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## RAVUE Non-Motorized Extrication Devices Analysis Report

### 1.4 Can the team easily fasten the device straps when the mannequin is loaded?

1	2	3	4	5
Fully	Partially	Adequately	Somewhat	No

What could be done to the device to make the straps more easy to use? \_\_\_\_\_

### 1.5 Are the handles on the device large enough for the team to grasp them easily while wearing PPE gloves?

1	2	3	4	5
Fully	Partially	Adequately	Somewhat	No

What could be done to the device to make it more easy to use while wearing gloves? \_\_\_\_\_

### 1.6 Does each responder appear to have enough room to move about while all are using the device?

1	2	3	4	5
Fully	Partially	Adequately	Somewhat	No

What could be done to the device to provide more room to move about per team member? \_\_\_\_\_

### 1.7 Can the victim be easily removed from the extrication device by personnel wearing PPE?

1	2	3	4	5
Fully	Partially	Adequately	Somewhat	No

What could be done to the device to more easily remove the victim? \_\_\_\_\_

## 2. Lightweight

**2.1** Can a single responder in Level A PPE easily carry the device?

1	2	3	4	5
Fully	Partially	Adequately	Somewhat	No

What could be done to make it easier for one person to carry this device alone?

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**2.2** Can the number of responders recommended by the manufacturer carry, drag, or roll the device without difficulty while in Level A PPE?

1	2	3	4	5
Fully	Partially	Adequately	Somewhat	No

What could be done to allow multiple devices to be carried into the zone on a single trip?

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**2.3** Can a single responder take multiple devices into the hot zone on a single trip?

1	2
Yes	No

What could be done to allow multiple devices to be carried into the zone on a single trip?

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## RAVUE Non-Motorized Extrication Devices Analysis Report

### 2.4 Does the device flex excessively when supporting a 200-pound mannequin?

1	2	3	4	5
No	Somewhat	Moderately	Significantly	Yes

What advice do you have in making the device stronger and more supporting?

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## 3. Portability

### 3.1 Can the team fold the device into a smaller size for transport?

1	2	3	4	5
Fully	Partially	Adequately	Somewhat	No

What could be done to improve the ability of this device to fold into a smaller size?

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### 3.2 Can one team member load/unload the device from a vehicle by himself/herself?

1	2	3	4	5
Fully	Partially	Adequately	Somewhat	No

What could be done to improve the ability for one responder to load/unload this device alone? \_\_\_\_\_

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#### 4. Durability

**4.1** Does the device show resistance to significant scarring, scuffing, or weakening?

1	2	3	4	5
Fully	Partially	Adequately	Somewhat	No

Are there any considerations for improving the device to make it more resilient to provide extended use? \_\_\_\_\_

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**4.2** Did any part(s) of the device fail to function during the assessment?

1	2	3	4	5
No	Some	Several	Many	Total Failure

Are there any considerations for improving the device to make it more resilient to provide extended use? \_\_\_\_\_

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**4.3** Did the device failure cause the extrication to be delayed or restarted?

0	1	2	3	4
NA	No	Moderately	Significantly	Yes

What would have prevented the failure from occurring?

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## RAVUE Non-Motorized Extrication Devices Analysis Report

**4.4** Did the device failure result in injury to the Responder, damage to his PPE, or potential injury to the victim?

0	1	2	3	4
NA	No	Might	Would	Definitely Would

What would have prevented the damage or injury from occurring?

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### 5. Non-Reactive/Reusable/Multiple Extractions

**5.1** Is the device reusable after each extrication?

1	2	3	4	5
Fully	Partially	Adequately	Somewhat	No

What caused the inability to reuse the device? \_\_\_\_\_

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**5.2** Does the device require adjustments and/or replacement of part(s) between uses?

1	2	3	4	5
No	Some	Several	Many	Yes

What could be done to the device and/or its parts to avoid this? \_\_\_\_\_

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## 6. Use in Multiple Environments (Vertical/Horizontal)

**6.1** Can the device be used to vertically *and* horizontally extricate the victim without him/her falling out or injuring team members?

1	2	3	4	5
Yes	Most Times	Some Cases	Occasionally	No

If not, what caused this to happen, and what could be done to the device to avoid this?

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**6.2** Does the device hold onto the mannequin in place in such a way that would not injure patient and/or restrict the airway or circulation?

1	2	3	4	5
Fully	Partially	Adequately	Somewhat	No

Is there anything that could be done to the device to improve its ability to safely hold a patient?

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**6.3** Does the team appear to be able to maneuver the device through tight spaces (i.e., doorway) without difficulty?

1	2	3	4	5
Fully	Partially	Adequately	Somewhat	No

What could be changed about the device to enable it to fit through small spaces?

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## 7. Ease of Decontamination

**7.1** Does the team appear to be able to fully manipulate the device while it is undergoing decontamination?

1	2	3	4	5
Fully	Partially	Adequately	Somewhat	No

If not, what problems occurred that hindered decontamination of the device?

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**7.2** Can the device be easily rinsed so as to reduce potential cross-contamination of victims?

1	2	3	4	5
Fully	Partially	Adequately	Somewhat	No

Is there anything that could be done to the device to minimize cross-contamination?

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## 8. Equipment Compatibility

**8.1** Is the device compatible with medical equipment that may be used during the extrication?

1	2	3	4	5
Fully	Partially	Adequately	Somewhat	No

What specific incompatibility did you find?

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## RAVUE Non-Motorized Extrication Devices Analysis Report

**8.2** Does the device *require* other pieces of equipment to maximize its efficiency?

1	2	3
No	Some Pieces	Several Pieces

What additional pieces were used or recommended?

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**9. Cost - 9.1 – 9.3** Cost information will be gathered during the post assessment analysis.

### **10.Ease of Assembly**

**10.1** Does the device require assembly?

1	2
Yes	No

Can assembly be performed with 2 minutes?

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**10.2** Did the device come with assembly instructions?

1	2
Yes	No

What could be done to improve the assembly instructions?

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## RAVUE Non-Motorized Extrication Devices Analysis Report

### 10.3 Are assembly instructions affixed to the device?

1	2
Yes	No

Are assembly instructions needed or is assembly intuitive?

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### 10.4 Are tools required for assembly?

1	2	3
No	Common Tools	Special Tools

Were special tools provided or are they generally available in your response organization?

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### 10.5 If assembly is required, is the device color coded to ease assembly?

0	1	2
NA	Easy to Follow	Difficult to Follow

Was color coding logical or intuitive (blue to blue; red to red; etc.)?

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## 11. Device Storage

**11.1** Can the device be routinely stored on the transport vehicle?

1	2	3	4
Yes	Must Rearrange	Some Difficulty	No

Can multiple devices be stored on a single vehicle without major impact?

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**11.2** Storage limitations. Will be addressed during the post assessment analysis.

**11.3** Does the device require a large amount of storage space?

1	2	3	4	5
No	Average	Slightly More	More	No

Can the device be altered to make reduce the storage space burden without decreasing it effectiveness?

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## 12. Interagency Compatibility

**12.1** Is interagency compatibility an issue with this extrication device?

1	2	3	4	5
No	Slight	Some	Significant	Yes

What would be required for responders from other disciplines or jurisdictions to use this device?

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## RAVUE Non-Motorized Extrication Devices Analysis Report

**12.2** Is there any special training required that would prevent other agencies from being capable of using the device?

1

2

3

No

Some

Yes

What type of training would be required?

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**12.3** If training is required, could it be provided within 15 minutes at the incident site?

0

1

2

NA

Yes

No

Can this training be performed in a field setting?

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### 13. Sizability

**13.1** Does the device permit adjustment for victims of different sizes?

1

2

3

4

5

Yes

Significant

Some

Slight

No

Is sizing required or desirable when using this device?

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## RAVUE Non-Motorized Extrication Devices Analysis Report

### 13.2 Are adjustments hard or time consuming to make?

1	2	3
No	Some	Yes

Describe the adjustments made?

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### 14. Simple Clear Instructions or Diagrams

#### 14.1 Does the device require special instructions pertaining to assembly and/or use?

1	2	3	4	5
No	Slight	Some	Significant	Yes

Were all of your questions on assembly or use adequately addressed in the instructions provided?

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#### 14.2 Were the instructions thorough enough to understand the procedures for assembly and/or use?

0	1	2	3	4
NA	Yes	Generally	Inadequate	None

How would you improve the instructions?

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## RAVUE Non-Motorized Extrication Devices Analysis Report

**14.3** Are there hazard warnings in the instructions that are not labeled on the device?

0

1

2

NA

No

Yes

Might misuse of the device addressed in the warning cause damage or injury to the responder or the integrity of the Level A suit?

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### 15.Recoverability

**15.1** Can the device be decontaminated for future use?

1

2

3

4

Absolutely

Easily

With Difficulty

No

What aspect of the device hinders complete decontamination?

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**15.2** Would decontamination be difficult due to small/tight areas on the device?

1

2

3

4

5

No

Somewhat

Generally

Significantly

Yes

What design change would be required to overcome this difficulty?

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## RAVUE Non-Motorized Extrication Devices Analysis Report

**15.3** Can the device be partially decontaminated and overpacked as contaminated waste?

1

2

3

4

Yes

Easily

With Difficulty

No

Would the device have to be cut up to be overpacked?

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### **16. Disposability**

**16.1** Disposability information will be gathered during the post assessment analysis.

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## APPENDIX C – DEVICE TABULATIONS

This appendix contains the scoring tabulation tables for the devices tested. The data is presented by device and evaluation criteria. The column labeled Assessment Total in each chart is taken from the individual Evaluator Debriefing Worksheets and is then tabulated using the methodology described in the sample in the Analysis Report.

**Table C-1. CombiCarrier® Scoring Tabulations**

High Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
1.0 Ease of Use	181	50.28	2.51	1.63	4.09
2.0 Lightweight	67	37.43	1.87	2.5	4.68
3.0 Portability	68	56.67	2.83	2.63	7.44
4.0 Durability	32	14.81	0.74	2.75	2.04
5.0 Reusable/Multiply Extractions <sup>1</sup>	43	35.83	1.79	2.25	4.03
6.0 Use in Multiple Environments	93	53.14	2.66	4	10.64
7.0 Ease of Decontamination <sup>2</sup>	34	37.78	1.89	2.88	5.44

Score Subtotal 38.36  
 Priority Spread Factor                      x 1

**HIGH PRIORITY SCORE 38.36**

Medium Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
8.0 Equipment Compatibility	41	49.4	2.47	4.75	11.73
9.0 Cost <sup>3</sup>					
10.0 Ease of Assembly	58	46.03	2.3	4.63	10.65
11.0 Device Storage	37	34.26	1.71	3.75	6.41

Score Subtotal 28.79  
 Priority Spread Factor                      x 2

**MEDIUM PRIORITY SCORE 57.58**

Low Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
12.0 Interagency Compatibility	54	45	2.25	5.13	11.54
13.0 Sizability	53	55.21	2.76	4.75	13.11
14.0 Instructions or Diagrams	51	38.64	1.93	3.75	7.24
15.0 Recoverability	95	60.9	3.05	6.13	18.7
16.0 Disposability <sup>4</sup>					

Score Subtotal 50.59  
 Priority Spread Factor                      x 3

**LOW PRIORITY SCORE 151.77**

# RAVUE Non-Motorized Extrication Devices Analysis Report

Table C-2. Evacuation Chair Calculation Tabulations

High Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
1.0 Ease of Use	94	26.11	1.31	1.63	2.14
2.0 Lightweight	61	29.9	1.5	2.5	3.75
3.0 Portability	30	25	1.25	2.63	3.29
4.0 Durability	32	14.81	0.74	2.75	2.04
5.0 Reusable/Multiply Extractions <sup>1</sup>	43	35.83	1.79	2.25	4.03
6.0 Use in Multiple Environments	64	35.56	1.78	4	7.12
7.0 Ease of Decontamination <sup>2</sup>	37	46.25	2.31	2.88	6.65

Score Subtotal 29.02  
Priority Spread Factor \_\_\_\_\_ x 1

**HIGH PRIORITY SCORE 29.02**

Medium Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
8.0 Equipment Compatibility	41	45.05	2.25	4.75	10.69
9.0 Cost <sup>3</sup>					
10.0 Ease of Assembly	58	46.77	2.34	4.63	10.83
11.0 Device Storage	46	42.59	2.13	3.75	7.99

Score Subtotal 29.51  
Priority Spread Factor \_\_\_\_\_ x 2

**MEDIUM PRIORITY SCORE 59.02**

Low Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
12.0 Interagency Compatibility	51	42.5	2.13	5.13	10.93
13.0 Sizability	32	33.33	1.67	4.75	7.93
14.0 Instructions or Diagrams	51	38.64	1.93	3.75	7.24
15.0 Recoverability	77	64.17	3.21	6.13	19.68
16.0 Disposability <sup>4</sup>					

Score Subtotal 45.78  
Priority Spread Factor \_\_\_\_\_ x 3

**LOW PRIORITY SCORE 137.34**

# RAVUE Non-Motorized Extrication Devices Analysis Report

**Table C-3. Folding Pole Litter Calculation Tabulations**

High Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
1.0 Ease of Use	147	43.88	2.19	1.63	3.57
2.0 Lightweight	53	28.04	1.4	2.5	3.5
3.0 Portability	31	25.83	1.29	2.63	3.39
4.0 Durability	34	16.11	0.81	2.75	2.23
5.0 Reusable/Multiply Extractions <sup>1</sup>	24	20	1	2.25	2.25
6.0 Use in Multiple Environments	140	80	4	4	16
7.0 Ease of Decontamination <sup>2</sup>	22	27.5	1.38	2.88	3.97

Score Subtotal 34.91  
Priority Spread Factor            x 1

**HIGH PRIORITY SCORE 34.91**

Medium Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
8.0 Equipment Compatibility	65	67.71	3.39	4.75	16.1
9.0 Cost <sup>3</sup>					
10.0 Ease of Assembly	78	59.09	2.95	4.63	13.66
11.0 Device Storage	46	49.68	2.48	3.75	9.30

Score Subtotal 39.06  
Priority Spread Factor            x 2

**MEDIUM PRIORITY SCORE 78.12**

Low Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
12.0 Interagency Compatibility	36	30	1.5	5.13	7.7
13.0 Sizability	72	75	3.75	4.75	17.81
14.0 Instructions or Diagrams	19	14.39	0.72	3.75	2.7
15.0 Recoverability	77	63.64	3.18	6.13	19.49
16.0 Disposability <sup>4</sup>					

Score Subtotal 47.7  
Priority Spread Factor            x 3

**LOW PRIORITY SCORE 143.1**

# RAVUE Non-Motorized Extrication Devices Analysis Report

**Table C-4. Henley Spinal Device Calculation Tabulations**

High Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
1.0 Ease of Use	244	67.78	3.39	1.63	5.53
2.0 Lightweight	79	40.72	2.04	2.5	5.1
3.0 Portability	72	60	3	2.63	7.89
4.0 Durability	111	51.39	2.57	2.75	7.07
5.0 Reusable/Multiply Extractions <sup>1</sup>	72	60	3	2.25	6.75
6.0 Use in Multiple Environments	121	67.22	3.36	4	13.44
7.0 Ease of Decontamination <sup>2</sup>	35	46.67	2.33	2.88	6.71

Score Subtotal 52.49  
Priority Spread Factor \_\_\_\_\_ x 1

**HIGH PRIORITY SCORE 52.49**

Medium Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
8.0 Equipment Compatibility	47	48.96	2.45	4.75	11.64
9.0 Cost <sup>3</sup>					
10.0 Ease of Assembly	67	50.76	2.54	4.63	11.76
11.0 Device Storage	37	34.26	1.71	3.75	6.41

Score Subtotal 29.81  
Priority Spread Factor \_\_\_\_\_ x 2

**MEDIUM PRIORITY SCORE 59.62**

Low Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
12.0 Interagency Compatibility	84	70	3.5	5.13	17.96
13.0 Sizability	50	52.08	2.6	4.75	12.35
14.0 Instructions or Diagrams	73	55.3	2.77	3.75	10.39
15.0 Recoverability	94	75.81	3.79	6.13	23.23
16.0 Disposability <sup>4</sup>					

Score Subtotal 63.93  
Priority Spread Factor \_\_\_\_\_ x 3

**LOW PRIORITY SCORE 191.79**

# RAVUE Non-Motorized Extrication Devices Analysis Report

**Table C-5. HMD Sked® Calculation Tabulations**

High Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
1.0 Ease of Use	78	21.67	1.08	1.63	1.76
2.0 Lightweight	94	46.08	2.3	2.5	5.75
3.0 Portability	26	21.67	1.08	2.63	2.84
4.0 Durability	33	15.28	0.76	2.75	2.09
5.0 Reusable/Multiply Extractions <sup>1</sup>	41	34.17	1.71	2.25	3.85
6.0 Use in Multiple Environments	84	46.67	2.33	4	9.32
7.0 Ease of Decontamination <sup>2</sup>	26	26	1.3	2.88	3.74

Score Subtotal 29.35  
Priority Spread Factor \_\_\_\_\_ x 1

**HIGH PRIORITY SCORE 29.35**

Medium Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
8.0 Equipment Compatibility	38	39.58	1.98	4.75	9.41
9.0 Cost <sup>3</sup>					
10.0 Ease of Assembly	71	53.79	2.69	4.63	12.45
11.0 Device Storage	29	26.85	1.34	3.75	5.03

Score Subtotal 26.89  
Priority Spread Factor \_\_\_\_\_ x 2

**MEDIUM PRIORITY SCORE 53.78**

Low Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
12.0 Interagency Compatibility	45	37.5	1.88	5.13	9.64
13.0 Sizability	24	25	1.25	4.75	5.94
14.0 Instructions or Diagrams	54	42.19	2.11	3.75	7.91
15.0 Recoverability	44	28.21	1.41	6.13	8.64
16.0 Disposability <sup>4</sup>					

Score Subtotal 32.13  
Priority Spread Factor \_\_\_\_\_ x 3

**LOW PRIORITY SCORE 96.39**

# RAVUE Non-Motorized Extrication Devices Analysis Report

**Table C-6. LifeSlider Calculation Tabulations**

High Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
1.0 Ease of Use	136	37.78	1.89	1.63	3.08
2.0 Lightweight	82	40.2	2.01	2.5	5.03
3.0 Portability	42	35	1.75	2.63	4.6
4.0 Durability	69	31.94	1.6	2.75	4.4
5.0 Reusable/Multiply Extractions <sup>1</sup>	46	38.33	1.92	2.25	4.32
6.0 Use in Multiple Environments	90	50	2.5	4	10
7.0 Ease of Decontamination <sup>2</sup>	38	34.55	1.73	2.88	4.98

Score Subtotal 36.41  
 Priority Spread Factor \_\_\_\_\_ x 1

**HIGH PRIORITY SCORE 36.41**

Medium Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
8.0 Equipment Compatibility	52	54.17	2.71	4.75	12.87
9.0 Cost <sup>3</sup>					
10.0 Ease of Assembly	53	41.73	2.09	4.63	9.68
11.0 Device Storage	61	56.48	2.82	3.75	10.58

Score Subtotal 33.13  
 Priority Spread Factor \_\_\_\_\_ x 2

**MEDIUM PRIORITY SCORE 66.26**

Low Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
12.0 Interagency Compatibility	51	42.5	2.13	5.13	10.93
13.0 Sizability	57	61.29	3.06	4.75	14.54
14.0 Instructions or Diagrams	62	47.69	2.38	3.75	8.93
15.0 Recoverability	96	61.54	3.08	6.13	18.88
16.0 Disposability <sup>4</sup>					

Score Subtotal 53.28  
 Priority Spread Factor \_\_\_\_\_ x 3

**LOW PRIORITY SCORE 159.84**

# RAVUE Non-Motorized Extrication Devices Analysis Report

**Table C-7. Pro-Lite Spineboard® Calculation Tabulations**

High Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
1.0 Ease of Use	135	37.5	1.88	1.63	3.06
2.0 Lightweight	66	33.17	1.66	2.5	4.15
3.0 Portability	72	60	3	2.63	7.89
4.0 Durability	60	27.78	1.39	2.75	3.82
5.0 Reusable/Multiply Extractions <sup>1</sup>	41	34.17	1.71	2.25	3.85
6.0 Use in Multiple Environments	105	58.33	2.92	4	11.68
7.0 Ease of Decontamination <sup>2</sup>	27	33.75	1.69	2.88	4.87

Score Subtotal 39.32  
Priority Spread Factor           x 1          

**HIGH PRIORITY SCORE 39.32**

Medium Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
8.0 Equipment Compatibility	33	36.26	1.81	4.75	8.6
9.0 Cost <sup>3</sup>					
10.0 Ease of Assembly	69	52.27	2.61	4.63	12.08
11.0 Device Storage	35	32.41	1.62	3.75	6.08

Score Subtotal 26.76  
Priority Spread Factor           x 2          

**MEDIUM PRIORITY SCORE 53.52**

Low Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
12.0 Interagency Compatibility	29	24.17	1.21	5.13	6.21
13.0 Sizability	57	59.38	2.97	4.75	14.11
14.0 Instructions or Diagrams	20	15.63	0.78	3.75	2.93
15.0 Recoverability	75	52.45	2.62	6.13	16.06
16.0 Disposability <sup>4</sup>					

Score Subtotal 39.31  
Priority Spread Factor           x 3          

**LOW PRIORITY SCORE 117.93**

# RAVUE Non-Motorized Extrication Devices Analysis Report

**Table C-8. RED SLED Calculation Tabulations**

High Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
1.0 Ease of Use	123	34.17	1.71	1.63	2.79
2.0 Lightweight	99	48.53	2.43	2.5	6.08
3.0 Portability	76	63.33	3.17	2.63	8.34
4.0 Durability	44	20.37	1.02	2.75	2.81
5.0 Reusable/Multiply Extractions <sup>1</sup>	40	33.33	1.67	2.25	3.76
6.0 Use in Multiple Environments	108	60	3	4	12
7.0 Ease of Decontamination <sup>2</sup>	29	36.25	1.81	2.88	5.21

Score Subtotal 40.99  
 Priority Spread Factor \_\_\_\_\_ x 1

**HIGH PRIORITY SCORE 40.99**

Medium Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
8.0 Equipment Compatibility	44	45.83	2.29	4.75	10.88
9.0 Cost <sup>3</sup>					
10.0 Ease of Assembly	62	46.97	2.35	4.63	10.88
11.0 Device Storage	65	62.5	3.13	3.75	11.74

Score Subtotal 33.5  
 Priority Spread Factor \_\_\_\_\_ x 2

**MEDIUM PRIORITY SCORE 67**

Low Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
12.0 Interagency Compatibility	50	41.67	2.08	5.13	10.67
13.0 Sizability	47	48.96	2.45	4.75	11.64
14.0 Instructions or Diagrams	44	34.92	1.75	3.75	6.56
15.0 Recoverability	60	55.56	2.78	6.13	17.04
16.0 Disposability <sup>4</sup>					

Score Subtotal 45.91  
 Priority Spread Factor \_\_\_\_\_ x 3

**LOW PRIORITY SCORE 137.73**



# RAVUE Non-Motorized Extrication Devices Analysis Report

**Table C-9. Spineguard® Calculation Tabulations**

High Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
1.0 Ease of Use	153	42.5	2.13	1.63	3.47
2.0 Lightweight	62	31.16	1.56	2.5	3.9
3.0 Portability	72	60	3	2.63	7.89
4.0 Durability	47	21.76	1.09	2.75	3
5.0 Reusable/Multiply Extractions <sup>1</sup>	52	43.33	2.17	2.25	4.88
6.0 Use in Multiple Environments	93	51.67	2.58	4	10.32
7.0 Ease of Decontamination <sup>2</sup>	39	48.75	2.44	2.88	7.03

Score Subtotal 40.49  
Priority Spread Factor           x 1

**HIGH PRIORITY SCORE 40.49**

Medium Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
8.0 Equipment Compatibility	35	37.36	1.87	4.75	8.88
9.0 Cost <sup>3</sup>					
10.0 Ease of Assembly	76	58.46	2.92	4.63	13.52
11.0 Device Storage	33	30.56	1.53	3.75	5.74

Score Subtotal 28.14  
Priority Spread Factor           x 2

**MEDIUM PRIORITY SCORE 56.28**

Low Priority Score					
Evaluation Criteria	Assessment Total	Percentage Score	Unweighted Score	Weighting Factor	Criteria Score
12.0 Interagency Compatibility	41	34.17	1.71	5.13	8.77
13.0 Sizability	45	46.88	2.34	4.75	11.12
14.0 Instructions or Diagrams	31	23.48	1.17	3.75	4.39
15.0 Recoverability	85	61.15	3.06	6.13	18.76
16.0 Disposability <sup>4</sup>					

Score Subtotal 43.04  
Priority Spread Factor           x 3

**LOW PRIORITY SCORE 129.12**

## NOTES:

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1. Evaluation Criteria 5.0, Non-Reactive/Reusable/Multiple Extractions. It is important to note that the material the devices are constructed from was not tested. A low score (good result) in this criterion indicates that the evaluators were able to reuse the device for multiply extractions and that the device required minor (if any) adjustments between extractions. No scientific testing was conducted to determine the reactivity of the materials with different chemicals or decontaminants.
2. Evaluation Criteria 7.0, Ease of Decontamination. It is important to note that actual decontamination was not performed. A low score (good result) in this criterion indicates that the evaluators felt the device could be manipulated during decontamination and that the device could be rinsed to reduce cross-contamination. No scientific testing was conducted to determine absorption or non-absorption of contaminants from the material.
3. Evaluation Criteria 9.0, Cost. Cost was not scored by the evaluators and is addressed in paragraph 5.c.ii.
4. Evaluation Criteria 16.0, Disposability. Disposability was not scored by the evaluators and is addressed in paragraph 5.d.ii.